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METHOD OF MAKING BLOCK COPOLYMERS BY SOLID STATE POLYMERIZATION

ABSTRACT OF THE DISCLOSURE

A method of preparing block copolymers by solid state polymerization is described. A mixture of a partially crystalline polycarbonate having activated terminal aryloxy groups, for example terminal methyl salicyl groups, when heated together with an oligomeric polyester having reactive terminal hydroxy groups under solid state polymerization conditions affords block copolymers. The activated terminal aryloxy groups play a key role in preserving the block lengths of the starting materials. A control sample in which the partially crystalline polycarbonate lacks activated terminal aryloxy groups, for example polycarbonates substituted by phenol, affords a much lower molecular weight, more highly randomized copolymer product. The product block copolymers are useful as "weatherable" plastic materials.